

NGO Focus Group Meeting

Tuesday September 6th 2005 Hotel Amigo, Rue De l' Amigo, 1,000 Brussels, Belgium

Meeting Objectives

Communicate the programme, objectives and expected results of the CO₂ Capture Project Phase 2.

Provide opportunities for ongoing engagement and participation to help shape and steer the program in 2005-8.

Participants

Kirsten Macey Climate Action Network Europe

Jason Anderson Institute for European Environmental Policy

Jasper Vis Stichting Natuur en Milieu

Manfred Treber GermanWatch

Gabriela von Goerne Greenpeace International

Catherine Pearce Friends of the Earth International

Paal Frisvold Bellona Beate Christiansen Bellona Claire Chevalier Bellona

Gardiner Hill CO₂ Capture Project & BP Iain Wright CO₂ Capture Project & BP Tony Espie CO₂ Capture Project & BP Livio Ruvo CO₂ Capture Project & Eni CO₂ Capture Project & Eni Antonio Pellegrino Ivano Miracca CO₂ Capture Project & Eni Arthur Lee CO₂ Capture Project & Chevron CO₂ Capture Project & Chevron Camilla Priselac Geir Vollsater CO₂ Capture Project & Shell



Meeting Structure and Content

Presentations were given by CCP participants (see agenda below), outlining technologies being developed by CCP:

Agenda

Time	Agenda items	Action	Leader
8.30hrs	Welcome, Introductions, Safety, Review Agenda	Information	lain Wright & Gardiner Hill
9.00hrs	Summary of CCP1	Information	lain Wright
9.30hrs	Introduction to CCP2	Information	lain Wright
9.45hrs	CCP2 Capture Programme	Information	Ivano Miracca
10.15hrs	Break		Amigo
10.30hrs	CCP2 Storage Programme (SMV)	Information	Livio Ruvo
11.00hrs	CCP2 Policies Programme	Information	Arthur Lee
11.15hrs	CCP2 Communications Programme	Information	lain Wright
11.30hrs	CCP2 Programme: Discussion • NGO Feedback	Feedback	Gardiner Hill
12.30hrs	Lunch		Amigo
13.30hrs	Close		



Questions and Feedback

- Q1. Is the project working to develop regulatory frameworks to support CCS?

 A1. No The project is focused on technology development. However, we plan to review legislation as it develops and will provide comment if requested.
- Q2. Has the project engaged/welcomed utilities and coal companies to participate? A2. Yes, but there has not been much interest, so we have put together a package for associate participation, that will allow utilities and others to join the project at a lower cost.
- Q3. How does CCP2 relate to other collaborations?
- A3. CCP2 is aware of a number of related initiatives in Europe (CASTOR, ENCAP etc) and around the world (US DoE RCSPs, CO2CRC) and endeavours to compliment those without duplicating them.
- Q4. The capture part of the program contains quite a bit of membrane development what is the track-record of membrane scale-up to commercialization?

 A4. The project is aware of this key issue.
- Q5. To what scale will your storage projects be?
- A5. In addition to lab-type R&D, the project envisages industrial-scale pilots and demonstration projects.
- Q6. Will remote sensing of geological storage leakage work won't it be overewhelmed by background variations?
- A6. Technologies have been demonstrated to be effective in detecting CO2 flux in and out of forests, but their performance in built-up areas has yet to be proven.
- Q7. Are you considering tracer studies/demonstrations.
- A7. CCP1 studied tracers and recommended molecules that are similar in size to CO2. CCP2 intends to demonstrate practical application of those recommended in CCP1.
- Q8. Have you considered the impact of impurities in a leakage scenario?
- A8. Geochemical reactions in the subsurface are more likely to increase storage security than to decrease it. The presence of impurities will undoubtedly influence the permitting process, but there are many years experience in Canada with acid gas (CO2 and H2S) injection.
- Q9. Have you carried out a risk assessment process that allows apples to apples comparison between the risks of CO2 geological storage and those associated with more established engineered systems (large dams, public buildings etc)?
- A9. We tried to get Harvard University to carry out such a study w/o success we will try again.
- Q10. Are Oil and Gas companies relying on CCS to be the "silver bullet" to solve the climate change issue?



CO₂ Capture Project

- A10. No. Most oil & gas companies have a portfolio of climate change initiatives, such as energy efficiency, renewables (solar & wind), only part of which is CCS. In order to tackle climate change, the world will have to deploy all the technologies available.
- Q11. What is the project interest in following the EU Water Framework Directive?
- Q11. This is one of a number of regulatory options. CCP just wants to follow developments and update our understanding.
- Q12. Have you considered the issue of long-term liability issues?
- A12. Yes, the Policies Team is developing a position paper.
- Q13. Are you considering projects paying into a "sinking fund" as insurance against long-term liabilities?
- A13. That is one of the options being considered by the Policies Team.
- Q14. Are you contributing to the ongoing work to include CCS in the EU ETS.
- A14. Yes. Some CCP Participants are contributing the EU ad-hoc work-group, being led by the UK DTI.
- Q15. The EU ETS does not give sufficient long-term commercial signal to encourage investment in such a long-term GHG option as CCS. Will CCP recommend an alternative Policy Framework?
- A15. Yes. The Policies Team is analyzing options.
- Q16. When you communicate CCS, will you compete for funding with renewable energy options?
- A16. No. CCS is a GHG mitigation option that could make a significant contribution **in addition to** renewables.
- Q17. Will CCP be carrying out a Risk assessment that compares CCS to other similar industrial practices? This must be well communicated before widespread deployment. A17. CCP will consider including that work within the SMV/Policies work program.